

A NEW *PAROCHROMOLOPIS* (EPERMENIIDAE)  
FROM COSTA RICA

JOHN B. HEPPNER

Department of Entomology, Smithsonian Institution, Washington, D.C. 20560

**ABSTRACT.** *Parochromolopis psittacanthus*, new species, is described from specimens reared from fruits of *Psittacanthus calyculatus* A. Don (Loranthaceae) in Costa Rica.

Biological studies by Dr. D. H. Janzen (University of Pennsylvania) in Costa Rica have involved the rearing of an undescribed species of Epermeniidae (Cupromorphoidea) of the genus *Parochromolopis*. The description of the moth follows so a name will be available for publication of the bionomics of the species.

**Parochromolopis psittacanthus, new species**

**Description.** Size, 4.0-4.6 mm forewing length. **Head:** fuscous, speckled with black and dull white. Labial palpus large, porrect, brown speckled with black and dull white, tufted dorsally on middle segment. Antenna with scape flattened, same coloration as head. **Thorax:** same coloration as head. Venter pale tan. Legs fuscous speckled with brown and tan. Forewing (Fig. 1) tan with black-tipped scales basally between veins and margins, as 4 tufts along dorsal margin, and inward by each tuft, and as 3 spots at mid-wing, end of cell, on distal  $\frac{1}{4}$  and subapically. Brown scales between black-tipped scales from mid-wing to apex. Venter fuscous. Hindwing gray fuscous;



FIG. 1. *Parochromolopis psittacanthus* Heppner, n. sp., paratype ♀.

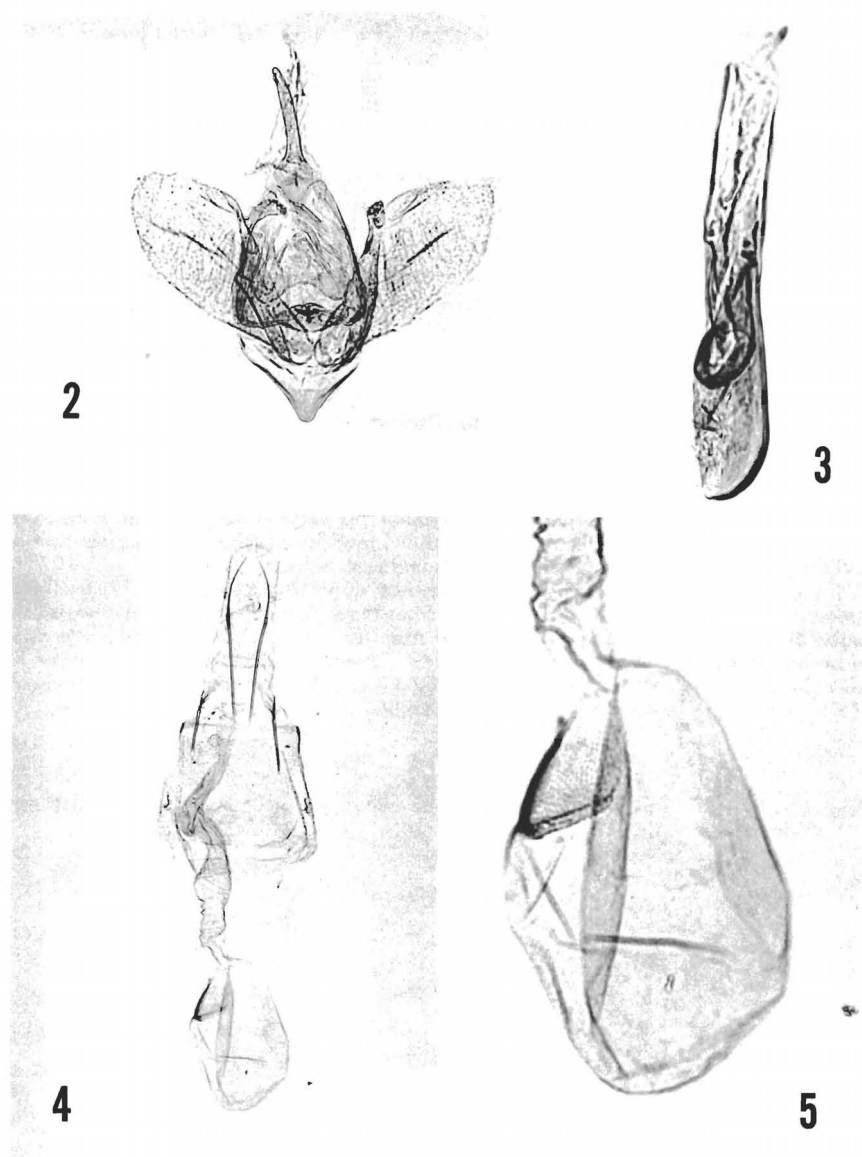


FIG. 2-5. *P. psittacanthus* Heppner, n. sp.: 2, holotype ♂ (slide USNM 77837); 3, aedeagus holotype ♂ (enlarged); 4, paratype ♀ (slide USNM 77836); 5, signum, paratype ♀ (enlarged).

venter fuscous. **Abdomen:** fuscous. Male genitalia as in Fig. 2: uncus long, narrow; tegumen as large as valva; vinculum with small triangular saccus; valva simple setaceous, with apex rounded but slightly oblique; dorsal margin of valva with twisted setaceous hook. Aedeagus subequal to distance from tip of uncus to saccus; cornutus a large recurved hook-like spine (Fig. 3). Female genitalia as in Fig. 4: ovipositor normal; posterior apophyses twice as long as anterior pair; ostium bursae small, membranous and merging into ductus bursae, which is membranous; bursa copulatrix elongate-ovate, with a spicule patch edged by a V-shaped keel-like signum (Fig. 5).

**Type.** Holotype ♂: Santa Rosa Natl. Park, Guanacaste Prov., Costa Rica, emerged Jan 1979 ex fruits *Psittacanthus calyculatus*, D. H. Janzen (USNM Type No. 76271).

**Paratypes.** 8♀, same data as holotype. (Paratypes to British Museum (Natural History) and Zoologisches Museum, Humboldt Univ., Berlin, DDR.; and USNM.)

**Biology.** The larvae are borers in the fruits of the host plant, *Psittacanthus calyculatus* A. Don (Loranthaceae), a tropical mistletoe. D. H. Janzen is describing the life history of the species in more detail in a separate paper.

**Remarks.** This species is superficially very similar to *Parochromolopis floridana* Gaedike from Florida, but the genitalia distinguish the two species. In *P. psittacanthus* there is no basal appendage on the valva as in *P. floridana*, the cornutus is larger, and in the female the keel-like signum is larger than in *P. floridana*. The two species appear to be very closely related but the male genitalia of *P. psittacanthus* actually have the valva and aedeagus more similar to *Parochromolopis parishii* Gaedike from Peru. The Peruvian species has the valva more quadrately blunt distally than in *P. psittacanthus* and the twisted appendage of the valva is somewhat longer.

The genus *Parochromolopis* was only recently described (Gaedike, 1977) for three species, one from southern Florida and two from Peru. *Parochromolopis psittacanthus* is the first epermeniid known from Central America. Various epermeniids are known to be borers of buds, fruits, seeds or are leaf miners as larvae, so the biology of *P. psittacanthus* conforms to the family characteristics. The host plant is the first record of the plant family Loranthaceae for the Epermeniidae.

#### LITERATURE CITED

- GAEDIKE, R. 1977. Revision der nearktischen und neotropischen Epermeniidae (Lepidoptera). Beitr. Ent. (Berlin), 27: 301-312.